SAFETY DATA SHEET

Hi-Green 15-2-20 + Mg

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation

Product name : Hi-Green 15-2-20+Mg
Trade name : Hi-Green 15-2-20+Mg
Fertilizer formula : 15-2-20 + Mg
Chemical formula : Not applicable/Mixture.
Use of the substance/preparation : Fertilizers.

Company/undertaking identification

Manufacturer/Supplier : Haifa Chemicals Ltd.
P.O. Box 10809, Haifa Bay 26120, Israel
Tel: 972-4-8469616 Fax: 972-4-8469953
Email: specialty@haifachem.co.il

Emergency telephone number : 972-4-8469603/4

2. Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Urea Formaldehyde	200-315-5	0 - 100	200-818-8	Not classified
Potassiumnitrate (Prills or coated)	7757-79-1	0 - 100	231-818-8	Not classified.
Monoammoniumphosphate	7722-76-1	0 - 100	231-764-5	Not classified.
Ammoniumsulfate	7783-20-2	0 - 65	231-984-1	R52
Magnesiumsulfate	14567-64-7	0 - 25	231-298-2	Not classified
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

See section 11 for more detailed information on health effects and symptoms.

4. First-aid measures

First-aid measures

Eye contact : In case of contact with eyes, rinse immediately with plenty of water. Obtain medical attention if symptoms occur.

Skin contact : Wash with soap and water. Obtain medical attention if symptoms occur.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : No specific hazard.

Hazardous thermal decomposition products : Thermal decomposition products are dependent on temperature conditions.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Non-explosive under normal conditions. Not considered an oxidizer because of the prilled/coated form of the salts.

6. Accidental release measures

Personal precautions : Use suitable protective equipment.

Environmental precautions : Avoid dispersal of spilled material, runoff and contact with waterways, drains and sewers.

Methods for cleaning up : Use a tool to scoop up solid or absorbed material and place into appropriate labelled waste container. Avoid creating dusty conditions and prevent wind dispersal.

7. Handling and storage

Handling : Do not ingest. Avoid contact of spilled material and runoff with surface waterways. Wash thoroughly after handling.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Packaging materials

Recommended : Use original container.

8. Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Monoammonium Phosphate	**EU OEL (Europe).** TWA: 5 mg/m^3 8 hour(s). Form: Dust

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Hand protection : Not required under normal conditions of uses. Gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to dusts.

Skin protection : No special protective clothing is required.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

General information

Appearance

Physical state : Solid. (Granular solid.)

Colour : Grey.

Odour : Odourless.

Important health, safety and environmental information

pH : Not applicable because of low solubility in water.

Melting point : Decomposition temperature: >200°C (392°F)

Explosive properties : Risks of explosion of the product in presence of mechanical impact: Not applicable. Risks of explosion of the product in presence of static discharge: Not applicable.

Bulk density : 0.95 to 1.1 (Water = 1)

Solubility : Dissolve very slowly, polymer coating is insoluble.

Octanol/water partition coefficient : Not applicable because of low solubility in water.

10. Stability and reactivity

Stability : Stable under recommended storage and handling conditions (see section 7).

Conditions to avoid : Elevated temperatures. Avoid all possible sources of ignition (spark or flame).

Materials to avoid : Reactive with reducing materials, metals, acids, alkalis and organic materials.

Hazardous decomposition products : Under fire - oxides of nitrogen, phosphorous, potassium when strongly heated it melts and decomposes releasing toxic fumes. In contact with alkaline materials it may release ammonia gas.

11. Toxicological information

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : Moderately irritating to eyes.

Acute toxicity

Product/ingredient name	Test	Result	Route	Species
Ammonium Sulfate	LD50	2840 mg/kg	Oral	Rat
	LD50	640 mg/kg	Oral	Mouse
Potassium Nitrate	LD50	3750 mg/kg	Oral	Rat
	LD50	1901 mg/kg	Oral	Rabbit
Urea	LD50	8471 mg/kg	Oral	Rat
Monoammonium Phosphate	LD50	>2000 mg/kg	Oral	Rat
	LD50	>5000 mg/kg	Dermal	Rabbit

Potential chronic health effects Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity :

Over-exposure signs/symptoms

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity data

Product/ingredient name	Species	Period	Result
Ammonium Sulfate	Oncorhynchus mykiss (LC50)	96 hour(s)	6.6 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>20 mg/l
	Daphnia magna (LC50)	96 hour(s)	>20 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	36.7 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	39.2 mg/l
Urea	Daphnia magna (EC50)	48 hour(s)	3910 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	17500 mg/l
Potassium nitrate	Poecilia reticulata (LC50)	96 hour(s)	180 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	188 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	191 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	200 mg/l
Magnesium Sulfate Anhydrous	Daphnia magna (EC50)	48 hour(s)	343.56 mg/l
	Pimephales promelas (LC50)	96 hour(s)	2820 mg/l

Persistence/degradability

Persistence potential : Not applicable.

Other adverse effects : This material is not expected to be harmful to aquatic organisms.

13. Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material, runoff and contact with waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

Classification: ADR/ADNR/IMDG/IATA: Not regulated.

Label: Not applicable.

Additional information

15. Regulatory information

EU regulations

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : S3/7- Keep container tightly closed in a cool place.
S8- Keep container dry.

Product use : Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.
- Industrial applications.

Other EU regulations

EU statistical classification (Tariff Code) : 32089091

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R22- Harmful if swallowed.
R52- Harmful to aquatic organisms.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : Xn - Harmful

16. Other information

History

Date of issue : 17/02/2010

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.